

Date: Thu, 8 Jul 93 11:38:23 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #832
To: Info-Hams

Info-Hams Digest Thu, 8 Jul 93 Volume 93 : Issue 832

Today's Topics:

"Necessary features" and the FT-5200 (was Re: Repeater coordination, complaints?)
 Algonquin 46m (150') dish on EME
 Antenna Resonance
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 Experience with IC-729
Henry 2KD HV Problem (Seek Advice) (2 msgs)
 LAST MINUTE ADVICE
 Microwave oven rectifier ratings?
 Mods for ICOM P2AT
 Old Hams never die, They just ...
 Poster of the frequency spectrum
 radios in movies
 Recharging ALKALINE batteries
Repeater systems with multiple transmitters
 resonant antenna and vswr

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 8 Jul 93 15:58:50 GMT
From: usc!howland.reston.ans.net!darwin.sura.net!news-feed-2.peachnet.edu!concert!
duke!news.duke.edu!ee.egr.duke.edu!jbs@network.UCSD.EDU
Subject: "Necessary features" and the FT-5200 (was Re: Repeater coordination,
complaints?)
To: info-hams@ucsd.edu

In article <1993Jul7.202814.1351@gallant.apple.com> COLLIER@gallant.apple.com
(Will Collier) writes:

>

>> {Joe sez FT-5100 will only do 5 watts out on Xband rpt}

>

>I beg to differ. I personally own a FT-5100, as well as three other hams
>in my area, and all of our units do a full 50 watts on cross band
>operation. I think you got some mis-information or possibly there is a
>version of the 5100 out that has now been altered to not provide the full
>power out (I seem to doubt it though). Our units are from 7 months to 2
>months old.

There are several local hams who have 5100s (may be older than yours), and
they all said their radios would only do crossband repeat on low power.
I'll mention your experience to them, and maybe they can get their radios
modified to work at full power.

-joe KD4LLV

--

You spend the night
Like you were spending a dime
- Lyle Lovett

Date: 8 Jul 93 14:20:19 GMT
From: news-mail-gateway@ucsd.edu
Subject: Algonquin 46m (150') dish on EME
To: info-hams@ucsd.edu

The Toronto VHF Society (VE3ONT) has received permission to use the
Algonquin 46 meter dish for EME tests during both weekends of
the ARRL EME Contest.

We _hope_ to do moonbounce on 144, 432, and 1296 MHz at some times
during the two weekends. Announcements of bands and operating
schedules will be forthcoming.

M.R. Owen W9IP

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*****
Michael R. Owen, Ph.D.                                a.k.a.: W9IP
Department of Geology                                Northern Lights Software
St. Lawrence University                               Star Route, Box 60
Canton, NY 13617                                    Canton, NY 13617
(315) 379-5975 - voice - (315) 379-0161 (6-9pm)
e-mail: MOWE@SLUMUS FAX - (315) 379-5804
*****
```

Date: 8 Jul 93 18:51:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: Antenna Resonance
To: info-hams@ucsd.edu

>Am I missing something here? ... I would be interested in hearing
>your explanation why the advice of making the antenna resonant is bad...
>Jim, WA6SDM jholly@cup.hp.com

Jim, the thing that you missed is that a full-wave center-fed antenna
-IS- resonant but it is a terrible match for 50 ohm coax. That is
something that almost everyone seems to forget once in awhile. Odd-
half wavelength center-fed antennas are low impedance and even half
wavelength center-fed antennas are high impedance at resonance.

73, Cecil, KG7BK

Date: Thu, 8 Jul 1993 13:06:34 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!uwm.edu!news.bbn.com!
hsdndev!nmr-z!dave@network.UCSD.EDU
Subject: battery types
To: info-hams@ucsd.edu

jeh@cmkrnl.com writes:

>In article <C9CKpJ.A68@acsu.buffalo.edu>, bowen@cs.buffalo.edu (Devon E Bowen)
writes:

>> A list of all batteries - rechargeable
>> and non-rechargeable - with a quick run-down of their characteristics
>> would be a nice thing to have in the archives. If anyone has any
>> list like this, I'd appreciate a copy. Or, if you can reference
>> any magazine articles for me that covers this stuff I can get it
>> and type in all the relevant information.

>Some of this info is in Horowitz and Hill.

>Dunno about magazine articles, but ... if SUNY has an EE department they're
>sure to have this information in their engineering library.

>Thanks in advance for your efforts in typing it in!!!

> --- Jamie Hanrahan, Kernel Mode Systems, San Diego CA
>Internet: jeh@cmkrnl.com (JH645) Uucp: uunet!cmkrnl!jeh CIS: 74140,2055

Check out these articles:

Knowing the Basics of Batteries to select and Use Them Properly
By Red Scholefield of Gates Energy Products
Electronic Design -June 1989

Choosing a Secondary Battery Technology
By Al Harville of Panasonic Ind. Co.
Powertechnics Magazine -Feb.1991

Choosing the Right Battery to Power the Portable Product
By John Costello of Duracell Inc.
Electronic Products -Dec. 1992

I stopped getting the Powertechnics mag. in 91. You may find other articles in the more recent issues.

----Dave Wrightson, Mass General Hospital, Boston Ma.
internet: dave@dbe.mgh.harvard.edu

"Knowing the Basics of B

Date: Thu, 8 Jul 1993 13:27:51 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!usc!sdd.hp.com!
col.hp.com!csn!teal.csn.org!erik@network.UCSD.EDU
Subject: DJ-580 TX/RX problem
To: info-hams@ucsd.edu

I have an Alinco DJ-580T that seems to be having a problem. SOMETIMES when I key up the radio, it indicates it is transmitting but does not. It won't even kick my linear amp into transmit. Also when the transmit problem is occurring the radio fails to receive anything, even when I know a station is transmitting on the frequency. I have tried various anttenas. No luck. One other piece of information... When the transmit problem occurs, the "ON AIR" indicator blinks instead of staying on. What does this indicate?

The radio is still under warrenty so I could have Alinco fix it along with having them do the intermod fix (which I will do anyway), but I thought I would see if others were experiencing the same problem.

TNX and 73,
Erik

--

SNAIL MAIL: Erik Mugele * INTERNET: erik@csn.org * "What some people mistake
829 Hathaway Dr #203C * AT&Tnet: 719.550.6188 * for the high cost of
Colorado Springs, CO 80915 * HAMnet: N5XYX * living is really the cost
U.S.A. * * of living high." -Dr. Bob

Date: Thu, 8 Jul 1993 15:35:47 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!apple!mumbo.apple.com!
gallant.apple.com!news@network.UCSD.EDU
Subject: DJ-580 TX/RX problem
To: info-hams@ucsd.edu

In article <C9uLEF.CI7@csn.org> Erik Mugele, erik@teal.csn.org writes:
>tried various anttenas. No luck. One other piece of information...
>When the transmit problem occurs, the "ON AIR" indicator blinks
>instead of staying on. What does this indicate?

Hi there Erik,

I used to own one of the Alinco DJ-580's, and if memory serves (it might not!), I believe the flashing ON AIR segment meant that the unit was overheating and would cease transmitting for a time, until it cooled down. Since your driving an amp with it, possibly your using it in a heavy load situation (a heavy load for a hand held anyway) and it is overheating?

My two cents.

Will
KB5WRK
Buda, Tx.

Date: 8 Jul 1993 07:23 EDT
From: usc!howland.reston.ans.net!darwin.sura.net!ra!cs.umd.edu!
skates.gsfc.nasa.gov!nssdca.gsfc.nasa.gov!stocker@network.UCSD.EDU
Subject: Experience with IC-729
To: info-hams@ucsd.edu

Would be interested in receiving via email any experiences (good or bad) that people may have had with the ICOM IC-729 transceiver.

thanks,

Erich, N3OXM

Date: Thu, 8 Jul 1993 14:50:37 GMT
From: worldbank.org!news@uunet.uu.net
Subject: Henry 2KD HV Problem (Seek Advice)
To: info-hams@ucsd.edu

I have a 5 year old Hentry 2KD amplifier. It has recently developed an annoying symptom, which I believe is associated with a high-voltage component failing.

The symptoms are a loud cracking sound which occurs periodically when the amplifier is warm. This occurs whether the amp is in operate or standby mode. No drop in HV is noticed on the meter (but it's heavily dampened), and no trace of arcing can be found in the power supply. (The problem still occurs when the HV to the RF deck is disconnected, so it appears to be a power supply problem.)

Has anyone experienced this (or similiar problem), and if so, any ideas what could be causing it? I could simply wait for the ailing component to fail... but that would likely happen in the middle of a pile-up for the 3V, or something equally as important.

Thanks for reading... Darrell (NR3Y).

Date: Thu, 8 Jul 1993 15:41:23 GMT
From: agate!howland.reston.ans.net!ux1.cso.uiuc.edu!uwm.edu!linac!newsaintmail@ames.arpa
Subject: Henry 2KD HV Problem (Seek Advice)
To: info-hams@ucsd.edu

In article <1993Jul8.145037.13777@worldbank.org> dearnshaw@worldbank.org (Darrell Earnshaw) writes:

>I have a 5 year old Hentry 2KD amplifier. It has recently developed
>an annoying symptom, which I believe is associated with a
>high-voltage component failing.

>

>The symptoms are a loud cracking sound which occurs periodically when the
>amplifier is warm. This occurs whether the amp is in operate or standby mode.

V is noticed on the meter (but it's heavily dampened), and no trace
>of arcing can be found in the power supply. (The problem still occurs when the
>HV to the RF deck is disconnected, so it appears to be a power supply
>problem.

...rest deleted...

Had this problem once. Try hy-potting the rectifiers with the deck, metering and filter cap disconnected - (normal disclaimers about high voltage safety and grounding methods apply here!)

I found an arc trace external to the diode package that was nearly invisible until it "lit up". You really have to try this test in situ since the problem may actually be a breakdown of an insulator.....

It really helps to hi-pot with a separate HV supply that is limited for current, that is capable a voltage higher than your normal operating value, and that doesn't have a large cap in it

Good Hunting and be careful...

Kermit W9XA

Date: 8 Jul 1993 13:12:30 GMT
From: topaz.bds.com!topaz.bds.com!ron@uunet.uu.net
Subject: LAST MINUTE ADVICE
To: info-hams@ucsd.edu

> There will almost surely be a ...-- (SK) at the
> end, since that's the only place that prosign is normally used.

The ARRL tapes even tell you this as part of the preamble (the test begins with 6 V's sent in two groups of three, and ends with the procedural signal for end of message). The six V's don't count, but the SK does count as two characters at the end. Note that this puports to be half a QSO but the SK is used inappropriately.

-Ron

Date: 8 Jul 93 12:03:44 GMT
From: news-mail-gateway@ucsd.edu
Subject: Microwave oven rectifier ratings?
To: info-hams@ucsd.edu

I have some block-type rectifiers from a microwave oven. They look similar to K2AW's HV modules but they lack any identification. What sort of PIV/current ratings should be expected from rectifiers like these? Just "ballpark" figures would be fine.

MRO

Michael R. Owen, Ph.D.
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Canton, NY 13617

(315) 379-5975 - voice -
e-mail: MOWE@SLUMUS FAX -

a.k.a.: W9IP
Northern Lights Software
Star Route, Box 60
Canton, NY 13617
(315) 379-0161 (6-9pm)
(315) 379-5804

Date: 8 Jul 93 14:16:06 GMT
From: news-mail-gateway@ucsd.edu
Subject: Mods for ICOM P2AT
To: info-hams@ucsd.edu

>A friend of mine has an ICOM P2AT, and he was wondering if there is anything
>you can do to modify it.

well -- you could drive over it with a steamroller or crush it in a vise or
press (like in "Terminator") or smash it with a sledge hammer or use it for a
sinkers when fishing or a tail for a large kite or encapsulate it in epoxy and
make it into a paperweight or drill through the middle of it and add some
hardware to make it into a small lamp.....

if you had 10 of them you could use them as duckpins. could be used as a prop
rod to hold up the hood of your hudson. or as a doorstop. or as a prop for a
large HF radio to get it at the right "tilt" for easy operating.

could design your own guts and scrap the internals. could paint over the LCDs
and pretend it's a single channel moto HT.

yes sir - lots of modifications to be done! if you need any more help like
this just ask ...8)

Date: 8 Jul 93 14:29:15 GMT
From: news-mail-gateway@ucsd.edu
Subject: Old Hams never die, They just ...
To: info-hams@ucsd.edu

> Date: 1 Jul 1993 11:46:03 -0700
> From: techbook.com!techbook.com!not-for-mail@uunet.uu.net
> Subject: Old Hams never die, They just ...
> To: info-hams@ucsd.edu
>
> David Adams (dadams@cray.com) wrote:
> : Several people have mentioned hearing CW in refrigerator motors or

> : other static, and suggesting the ghosts of past hams haunting
> : old equipment. I'm wondering if we can fill out the phrase...
>
> : Old Hams never die, They just loose their connection?
>
> : Any better ideas?
>
> : They just loose power?
>
> : go on LONG DXpeditions?
>
> How about:
>
> Old Hams never die, They just rePETER out!
or..
Old Hams never die, They just cause less TVI..

oopps, excuse me, just relating to my own probs..
73

```
+-----+
| Todd Spicer Cottage Grove, WI. Usa 53527 |
| McKesson Corporation - Service Merchandising Division |
|
| Amprnet - NOS-BBS-> wf9s.ampr.org [44.92.0.35] |
|
| Packet ax25 mail - wf9s@wd9esu.#scwi.wi.noam. |
| Internet - wf9s@pgd.adp.wisc.edu |
| Ma-Bell - |
+-----+
<disclaimer>
```

Date: 8 Jul 93 06:26:20 GMT
From: pitt.edu!dsinc!wells!beyonet!olwejo!bob@uunet.uu.net
Subject: Poster of the frequency spectrum
To: info-hams@ucsd.edu

In <C9o6Bp.1nF@cmptrc.lonestar.org>, carter@cmptrc.lonestar.org writes:
>In article <xo\$@byu.edu> richard@alaska.et.byu.edu (Richard B. Christensen)
writes:
>>Anyone seen a poster describing the different band allocations?
>
>Unfortunately, I have never really seen a
>good poster for this. Best I've come across are little cross-references
>for 3-30 MHz.

Omega Technologies used(?) to put out a full-color poster on the U.S. RF Allocations. It's about 4'x3', in color, listing users, and primary/secondary allocation usage. It covers the RF spectrum of 3kHz to 300GHz. I think that the chart said it was similar to a U.S. Department of Commerce poster.

--

Bob Kupiec, N3MML		Internet: beyonet!bob@vu-vlsi.vill.edu
Morrisville, PA, USA		(or) bob@zero.com
(40d 12'N / 74d 48'W)		AX.25: n3mml@wb3ftp.#epa.pa.usa.noam
"Motorola 68k Inside!"		100% UNIX ~ NO DOS! ~ Get WiReD ~ PGP key avail

Date: 8 Jul 93 17:28:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: radios in movies
To: info-hams@ucsd.edu

Two or three nights ago on Cinemax there was a really stinko movie "Guns".

I watched a guy talk on a Tektronix oscilloscope. It even still had the light shield on it.

He was talking to an aircraft, I think.

73 de Jack, K9CUN

Date: Thu, 8 Jul 1993 15:32:34 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!uunet.ca!promis.com!news.promis.com!bell@network.UCSD.EDU
Subject: Recharging ALKALINE batteries
To: info-hams@ucsd.edu

julian@bongo.tele.com (Julian Macassey) writes:

> If you seriously think that someone has discovered that
>Mallory and Union Carbide have lied to us for all these years and you
>can really recharge Alkaline batteries, how come it has taken Dick
>Clark and this long for the secret to come out?

> Also, how come no-one has built a "made for recharging"
>alkaline?

There was a spate of news coverage a month or so back on a Canadian

company licensing technology for recharging alkalines. From my hazy memory, I seem to remember:

- * The alkaline batteries were specially designed and manufactured for recharging.
- * The chargers would not be the same as NiCad chargers.
- * The company Rayovac(?) came into it somewhere - I think as a licensee.
- * Battery life was in the 25 cycle range, but each cycle gave the same performance as an Alkaline (as opposed to a NiCad).
- * Product launch was supposed to be this year

Anybody else remember this?

--

-- Mike Bell --	Leapfrog Software Technology Inc.	
Internet: <bell@promis.com>	172 Ridge Road, Bolton, Ontario	
Compuserve: 71062,3656	Canada L7E 4V4	
Tel: +1 (416) 857-4326	"Analysis, OO Design, and Development"	

Date: 8 Jul 93 07:48:21 GMT
From: ogicse!uwm.edu!ux1.cso.uiuc.edu!moe.ksu.ksu.edu!matt.ksu.ksu.edu!
news@network.UCSD.EDU
Subject: Repeater systems with multiple transmitters
To: info-hams@ucsd.edu

Are there any repeater systems or repeater networks that use multiple transmitters on a single frequency? I have never heard of one in amateur use, but I remember hearing about an FBI system where widely-dispersed transmitters used the same frequency to cover very large areas. As I recall, the transmitters were all phase-locked to avoid interference, although I bet receiver capture is more important to system performance.

This would seem like an ideal setup for wide-area repeater networks, such those that cover large stretches of Interstate.

-Steve Schallehn KB0AGD
Kansas State University

PS: Could this of been the predecessor to trunking systems?

Date: Wed, 7 Jul 1993 17:49:12 GMT
From: usc!sol.ctr.columbia.edu!caen!rphroy!kocrsv01!c2xjcb@network.UCSD.EDU
Subject: resonant antenna and vswr

To: info-hams@ucsd.edu

In article <C9r8Mu.6Jz@cup.hp.com>, jholly@cup.hp.com (Jim Hollenback) writes:

> Am I missing something here? Let's see, a resonant inverted vee has an impedance
> of around 50 ohms, my transmitter is set up for 50 ohm output, I use 50 ohm
> cable. Seems to me if I make the inverted vee resonant, my vswr would be
> pretty low. Jack, I would be interested in hearing your explanation why
> the advice of making the antenna resonant is bad advice and is sending the
> new ham off to get a can of 'bitter ends'.
> Jim, WA6SDM
> jholly@cup.hp.com
>

Gees, last time I looked in the ARRL Antenna Handbook, it said that a
"resonant" 1/2-wave dipole (in free space) was 73 Ohms and that a
1/4-wave vertical was 37 Ohms . . . not a "great" SWR (1.5:1) here.
The book also had a graph showing impedance vs height above ground,
and the impedance could easily hit 100 Ohms at the right height
(forget what fraction of a wavelength off-hand), giving a 2:1 SWR.
Thus, "resonance" doesn't guarantee anything about SWR.

The wire antennas I run are at 25ft, and were cut to "resonance" (using a
grid-dip meter at the feedpoint) when installed. SWR stunk, and I
found that I had to "cut down" the lengths a bit to get them to appear
1:1 at the shack. Now they are not "at resonance", but my rig sees
nearly 1:1.

There was an article in QST several months ago called (I think) "My
Coax Tunes My Antenna" . . . It's interesting how SWR of an antenna
"changes" depending upon where along the coax you look.

--

James C. Bach	Ph: (317)-451-0455	The views & opinions expressed
Advanced Project Engr.	GM-NET: 8-322-0455	herein are mine alone, and are
Powertrain Strategy Grp	Amateur Radio: WY9F	NOT endorsed, sponsored, nor
Delco Electronics Corp.	Just say NO to UNIX!	encouraged by DE or GM.

Date: 8 Jul 1993 13:15:21 GMT
From: topaz.bds.com!topaz.bds.com!ron@uunet.uu.net
To: info-hams@ucsd.edu

References <4191@eram.esi.COM.AU>, <21et0t\$pmu@jericho.mc.com>,
<4212@eram.esi.COM.AU>
Subject : Re: REQUESTING CUSTOM CALLSIGNS ???

> But you only get three requests, then you get the next one in line.

> This was introduced because the clerks were being pestered for callsigns
> of peoples' initials, "dead mens" callsigns (old two-letter ones like
> VK2AA that for some odd reason are sought after as status symbols) etc.

Back 20 years or so ago in the US, you could pay \$20 for the privelege
of requesting a callsign. If it was available, you got it, if not, the
FCC pocketed the \$20 and issued you one in sequence. Best to do your homework
before sending in the 610.

-Ron

Date: 8 Jul 1993 17:30:52 GMT
From: gumby!wupost!trinews.sbc.com!mac-gianino.tri.sbc.com!gianino@yale.arpa
To: info-hams@ucsd.edu

References <C9rnpC.Btu@murdoch.acc.Virginia.EDU>,
<1993Jul6.234343.10361@bongo.tele.com>, <bell.742145554@news.promis.com>
Subject : Re: Recharging ALKALINE batteries

Re: Recharging ALKALINE batteries

As I recall, Mallory came out with rechargable alkaline cells about 1969.

I remember because I bought a set for a 1.5 Watt CB walky-talky along
with the required charger. The charger was nothing special- just a low
current 16 hour charger. The batteries (I had the AA size, but you could
get C and D also) were more expensive than regular alkaline, they had
poor capacity and had a short life. They were not on the market long.

About the same time there was a lead-acid wet cell battery on the market
that replaced a standard 9V battery. It had 4 compartments and looked
just like a tiny car battery with a clip on it. They were cheap (\$2),
could handle high currents, had a reasonable capacity and were simple to
charge. One problem -when they leaked, they destroyed whatever they were
in.

Ken WB0QNA

End of Info-Hams Digest V93 #832
